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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,064	08/07/2001	Ara Patapoutian	Q98-1097-US2	1744
32093	7590	06/15/2004	EXAMINER	
HANSRA PATENT SERVICES 4525 GLEN MEADOWS PLACE BELLINGHAM, WA 98226			CHUNG, PHUNG M	
			ART UNIT	PAPER NUMBER
			2133	//

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/924,064

Applicant(s)

PATAPOUTIAN ET AL

Examiner

Phung My Chung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9, 11-20, 22-30, 32-38, 40-45 and 54-58 is/are allowed.
- 6) ☒ Claim(s) 10, 21, 31, 39 and 46-53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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1. Claims 10, 21, 31, 39 and 46-53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 10, lines 1-2, "A data storage device prepared for storing of data ty the method of claim 1" is a hybrid claim because device and method can not claim in the same claim.

As per claim 21, lines 1-2, "A data storage device prepared for storing of data ty the method of claim 11" is a hybrid claim because device and method can not claim in the same claim.

As per claim 31, lines 1-2, "A data storage device prepared for storing of data ty the method of claim 22" is a hybrid claim because device and method can not claim in the same claim.

As per claim 39, lines 1-2, "A data storage device prepared for storing of data ty the method of claim 32" is a hybrid claim because device and method can not claim in the same claim.

As per claim 46, lines 1-2, "A data storage device prepared for storing of data ty the method of claim 40" is a hybrid claim because device and method can not claim in the same claim.

As per claim 47, lines 1-5, "A data storage device...at predetermined track density, linear density, or error code level of data, one or more of which are measured" is not clear how the predetermined track density, the linear density, or the error code level of data, one or more of which are measured?

In addition, The title of the invention is "Improving the data storage capacity of data storage media" but in the claim there isn't any where show how to improve the data storage capacity of the data storage media.

A correction is required.

As per claim 50, lines 3-5, "maximum recordable track density, maximum recordable linear density of data, or a minimum recordable error code level of data, each of which is measured for a paired head and media surface" is not clear how they are measured and what are the maximum recordable track density, the maximum recordable linear density of data, and what is the minimum recordable error code level of data?

A correction is required.

As per claims 48-49, 51-53, these claims are also rejected because they dependent upon the rejected base claim.

2. Claims 1-9, 11-20, 22-30, 32-38, 40-45, and 54-58 are allowable.
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 47-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Hearn et al (5,216,655).

Hearn et al disclose the invention substantially as claimed, comprising: a head, a media surface, and a controller capable of providing signals to the head for

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reading and writing data on a portion of the media surface and at a predetermined track density is inherent in the system of Hearn et al.

(See col. 9, lines 51-55).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phung My Chung whose telephone number is 703-305-9686. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 703-305-9595. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



PHUNG M. CHUNG  
PRIMARY EXAMINER